Ontario

Ministry of
Northern Development
and Mines

Mines and
Minerals
Division

GEOLOGICAL DATA INVENTORY FOLIO

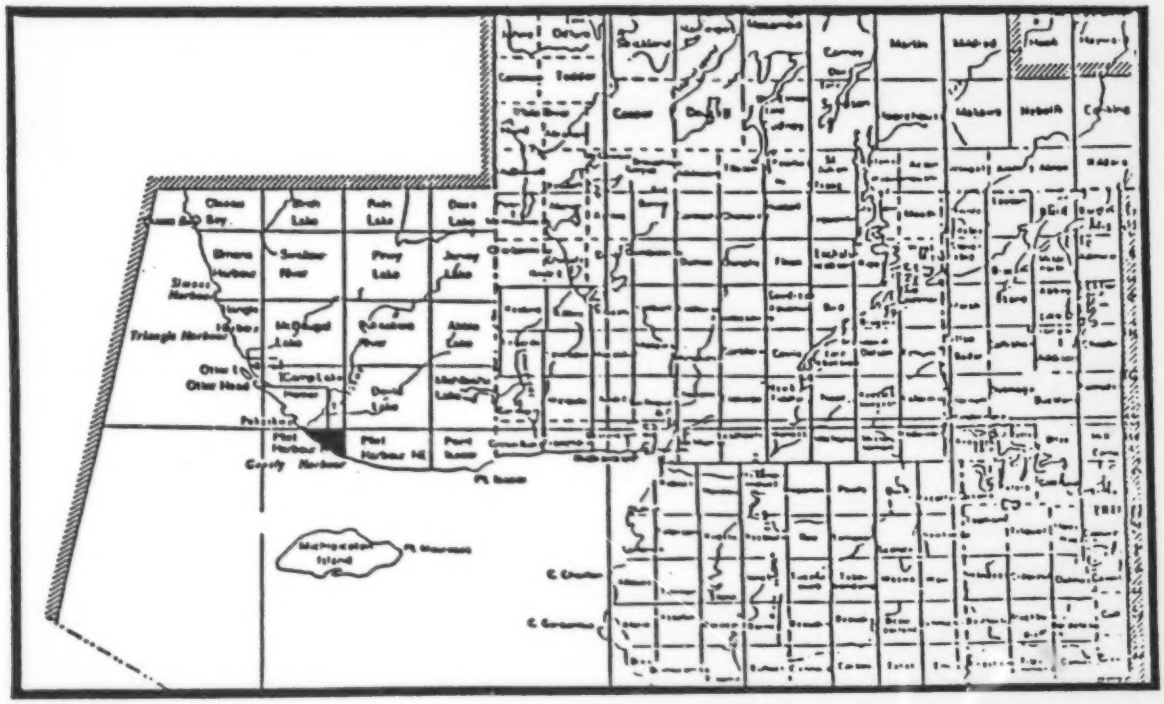
GDIF 592

PILOT HARBOUR NW AREA

Sault Ste. Marie Mining Division
N.T.S. No. 41N/13NW

Compiled by the staff of
the Resident Geologist's Office

WAWA



LOCATION MAP

Mining Claim Map Number M-20

This project was funded by the Northern Development Fund, Wawa Economic Development Initiatives

STATEMENT: This inventory is unedited. Discrepancies may occur for which the Ontario Ministry of Northern Development and Mines does not assume liability. Information from this source may be quoted if credit is given. Reference to this inventory should be made as follows:

Wawa Resident Geologist's Office, 1991. Pilot Harbour NW Area, Geological Data Inventory Folio 592; compiled by the staff of the Resident Geologist's Office, Wawa.

Original Compilation by: Howson, Tim, 1986.

Date	Page(s) Revised	Revised by
11/89	1, 4-2, 6-2, 9-1, 10-1, 11-1, 11-2, 11-3, 13-1, 13-2, 13-4, 14-1, 15-1	C.L.

Date	Page(s) Revised	Revised by

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TABLE OF CONTENTS

Data Sources Checklist 1

Mineral Commodities Reference List 2

Mineral Occurrences ..... 3 - 1,2. . .

Type of Work ..... 4 - 1,2. . .

Drillhole Summary ..... 5 - 1,2. . .

Airborne Geophysical Survey Data ..... 6 - 1,2. . .

Geochemical Survey Data ..... 7 - 1,2. . .

Geochronology Data ..... 8 - 1,2. . .

Air Photographs, Mosaics, Imagery ..... 9 - 1,2. . .

Topographic Maps ..... 10 - 1,2. . .

Newspaper Clippings File ..... 11 - 1,2. . .

OGS/ODM General Index Search ..... 12 - 1,2. . .

Selected References ..... 13 - 1,2. . .

Notes ..... 14 - 1,2. . .

Addenda ..... 15 - 1,2. . .

Addenda 1. Map showing air photos available for viewing

ACCOMPANYING MAPS (see map legends on outside back cover).

A. Files Index Map (s) ..... Map A-1

B. Exploration Data Map (s) ..... Map B-1

ABBREVIATIONS LIST

A.F.R.O.	Assessment Files Research Office (Toronto)
Ann. Rept. (A.R.)	Annual Report
A.R.I.P	Aggregate Resources Inventory Paper
Bull	Bulletin
C.I.M.M.	Canadian Institute of Mining and Metallurgy
C.J.E.S.	Canadian Journal of Earth Sciences
C.M.J.	Canadian Mining Journal
Econ. Geol.	Economic Geology
E.M.R.	Department of Energy, Mines and Resources
E.P.B.	Earth Physics Branch
G.A.C.	Geological Association of Canada
GC	Geological Circular
GDIF	Geological Data Inventory Folio
Geol.	Geology
Geol. Soc. Amer. Bull.	Geological Society of American Bulletin
GR	Geoscience (Geological) Report
GSC	Geological Survey of Canada
I.L.S.G.	Institute on Lake Superior Geology
IMR	Industrial Mineral Report
I.O.C.	Report of the Iron Ore Committee (1923)
Jour. (or J)	Journal
MDC	Mineral Deposit Circular
M.D.I. (R)	Mineral Deposit Inventory (Record)
Mem	Memoir
MNDM	Ministry of Northern Development and Mines
MNR	Ministry of Natural Resources
MP	Miscellaneous Paper
MRC	Mineral Resources Circular
N.M.I.	National Mineral Inventory
NOEGTS	Northern Ontario Engineering Geology Terrain Study
NTS	National Topographic System
O.B.M.	Ontario Bureau of Mines
O.D.L.F.	Ontario Department of Lands and Forests
ODM	Ontario Department of Mines/Ontario Division of Mines
ODMNA	Ontario Department of Mines and Northern Affairs
OFR	Open File Report
OGS	Ontario Geological Survey
P.R.	Preliminary Report
Prelim. (or P)	Preliminary
R.C.	Royal Commission on Mineral Resources of Ontario (1890)
S.M.D.R.	Source Mineral Deposit Record
SOEGTS	Southern Ontario Engineering Geology Terrain Study
Sum. Rept.	Summary Report
OFM	Open File Map
OCRS	Ontario Centre for Remote Sensing
CCRS	Canada Centre for Remote Sensing
WRGO	Wawa Resident Geologist's Office

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DATA SOURCES CHECK LIST

NOTE: The following sources have been searched to compile the data for this area. If no reference data was found the appropriate box is marked 'no': if reference data was found, the box is marked 'yes'.

All reference data found are included in the following pages. If the box is blank, the data source has not yet been searched. If the box is marked N.A., the source item is Not Applicable to this area and therefore not searched.

	SOURCES OF DATA	Data	Initial
1	Resident Geologist's Office Files	Yes	T.H.
2	Assessment Files Research Office, Toronto	yes	A.F.R.O.
3	OGS/ODM General Index	yes	T.H.
4	Catalogue of Airborne Geophysical Surveys (ODM)	No	T.H.
5	ODM Mineral Resources Circulars and OGS Mineral Deposits Circulars	Yes	T.H.
6	ODM Industrial Mineral Reports	No	T.H.
7	Bibliography of Post Precambrian Theses - Karrow (ODM MP 1)	No	T.H.
8	Bibliography of Precambrian Theses - Ginn (ODM MP 2)	No	T.H.
9	Newspaper Clippings File	Yes	T.H.
10	GSC Index to Publications	Yes	T.H.
11	OGS Index to Published Maps and Reports - MP 77 and Supplements to MP 77	Yes	T.H.
12	OGS Index Maps	Yes	T.H.
13	Source Mineral Deposit Records (OGS)	No	T.H.
14	Author - Subject Articles File	Yes	T.H.
15	ODM/OGS Miscellaneous Papers	Yes	T.H.
16	ODM Geological Circulars	No	T.H.
17	OGS Study Series	No	T.H.
18	ODM Preliminary Reports	No	T.H.
19	ODM Bulletins	No	T.H.
20	ODM/OGS Open File Reports	Yes	T.H.
21	OGS Northern/Southern Ontario Engineering Geology Terrain Studies	Yes	T.H.
22	OGS Aggregate Resources Inventory Papers	No	T.H.
23	OGS Mineral Potential Maps	Yes	T.H.
24	Drill Core Library Catalogue	No	T.H.
*			

MINERAL COMMODITIES REFERENCE LIST

anh ..... Anhydrite
ank ..... Ankerite
ap ..... Apatite
arg ..... Argentite
As ..... Arsenic
asp ..... Arsenopyrite
asb ..... Asbestos
ba ..... Barite
be ..... Beryl
Bi ..... Bismuth
bn ..... Bornite
Cd ..... Cadmium
calc ..... Calcite
carb ..... Carbonate
▲cc ..... Chalcocite
▲cp ..... Chalcopyrite
ch ..... Chert
clay ..... Clay
Co ..... Cobalt
cob ..... Cobaltite
Cu ..... Copper
cor ..... Corundum
dol ..... Dolomite
ep ..... Epidote
fel ..... Feldspar
fl ..... Fluorite (flurospar)
fu. ..... Fuchsite
gn. ..... Galena
gt. ..... Garnet
goe ..... Goethite
Au ..... Gold
gf ..... Graphite

gl ..... Gravel
gyp ..... Gypsum
hem ..... Hematite
Fe ..... Iron
▲IF ..... Iron Formation
jas ..... Jasper
ky ..... Kyanite
Pb ..... Lead
lim ..... Limonite
Li ..... Lithium
mgst ..... Magnesite
mag ..... Magnetite
▲mc ..... Malachite
Mn ..... Manganese
mb ..... Marble
mar ..... Marcasite
ma ..... Marl
mi ..... Mica
mo ..... Molybdenite
Mo ..... Molybdenum
mon ..... Monazite
ne .... Nephelite (nepheline)
Ni ..... Nickel
Nb ..... Niobium
Pd ..... Palladium
pent ..... Pentlandite
Pt ..... Platinum
▲py ..... Pyrite
pyl ..... Pyrochlore
po ..... Pyrrhotite
q ..... Quartz
qcv .. Quartz carbonate vein

ra ..... Radioactive minerals
RE ..... Rare Earths
sd ..... Sand
sgl ..... Sand and gravel
ss ..... Sandstone
scap ..... Scapolite
shee ..... Scheelite
serp ..... Serpentine
sh ..... Shale
sid ..... Siderite
si ..... Silica
Ag ..... Silver
sl ..... Slate
sm ..... Smaltite
sod ..... Sodalite
spec ..... Specularite
sp ..... Sphalerite
spd ..... Spodumene
s ..... Sulphides
talc ..... Talc
Te ..... Tellurium
th ..... Thorite
Th ..... Thorium
ti ..... Titanite
Ti ..... Titanium
tour ..... Tourmaline
W ..... Tungsten
uran ..... Uraninite
U ..... Uranium
verm ..... Vermiculite
Zn ..... Zinc
zr ..... Zircon

ADDITIONS

*

▲ Solid triangles indicate metal and mineral occurrences shown on the accompanying maps.

PILOT HARBOUR NW

MINERAL OCCURRENCES			Source Min. Dep. Record	References in OGS Min. Dep. Cir. and Indus. Mineral Rpts.	Additional References and/or Remarks
Map Ref. Letter	(see Data Map) Name(s)	Mineralization			
A	Unnamed Occurrence	cp, mc, cc, py			-see ODM Map 2332 -see file St. Germain 0010 -see file 41N/13NW 0012-A1
B	Julia River Occurrence	IF		MDC 11 p. 381	-see ODM Map 2332 -see Report of the Iron Ore Committee (I.O.C.) p. 187 -see file 41N/13NW 0012-A1 -see OBM Map 14a
C	Unnamed Occurrence	cp, cc, mc			-see file St. Germain 0010

TYPE OF WORK (see Files Index Map) Exploration Files		Numbers below represent the year of the work ; e.g. 68 for 1968																	
									Airborne			Ground							
Map Ref. No.	Company/ Author (file number)	Geological	Geochemical	Trenching or Stripping	Drilling	Assay Data	Underground Work	Prospectus Notes Corresp	Mag	EM	Rad	Mag	EM	Rad	IP	Self potential	Resistivity	Other Data	or footnotes
1	Noranda Exploration Co. Ltd. (41N/13NW 0010)											83	83						N-3
2	New Beginnings Resources Inc. (41N/13NW 0011)								83	83									
3	Group Holdings Ltd. (41N/13NW 0012-A1)								85	85									
4	Asarco Exploration Co. of Canada Ltd. (St. Germain 0010)	72				72						72	72						N-1
5	Noranda Exploration Co. Ltd. (41N/13NE 0011)											82	82						
6	Cotton Valley Resources Ltd. (41N/13NE 0014)							83	83	83									

SEE PAGE 13-1,... NOTES, FOR ITEMS LISTED BY NUMBER IN THIS COLUMN

TYPE OF WORK (see Files Index Map) Exploration Files		Numbers below represent the year of the work ; e.g. 68 for 1968																			
										Airborne			Ground							
Map Ref. No.	Company/ Author (file number)	Geological	Geochemical	Trenching or Stripping	Drilling	Assay Data	Underground Work	Prospectus Notes Corresp	Other Data or footnotes	Mag	EM	Rad	Mag	EM	Rad	IP	Self Potential	Resistivity			
7	White, H.V. (42C/04SW 0012)									83	83										
8	Cream Silver Mines Ebony Gold Production (WP-Pilot Harbour NE-4)								N-2	88	88										
9	Dominion Explorers Inc. (WP-Pilot Harbour NE-5)								N-2	88	88										
10	Daiwan Engineering Ltd. (WP-Pilot Harbour NW-1)								N-2	89	89										

SEE PAGE 13-1,...NOTES, FOR ITEMS LISTED BY NUMBER IN THIS COLUMN

DRILLHOLE SUMMARY

Drilling Location Number on Map	(see Exploration Data Map) Company Name (file number)	Company Drillhole Number	Date Drilled	Bearing Azimuth	Initial Dip of Hole	Thickness of Overburden	Total Length of Hole	Mineralization Noted in Log	Assay Data Included for

● —— indicates core stored at Drill Core Library

PILOT HARBOUR NW

Map Index No.	AIRBORNE GEOPHYSICAL SURVEY DATA		Flight Altitude	Flight Line Direct.	Flight Line Spacing
	-by -for -year	Type of Survey			
0	-by Scintrex Ltd. -for OGS (Map 80480) -1980	-a. Scintrex HEM-802 electromagnetic system -b. Scintrex MAP-4 proton precession type magnetometer	30m	N-S	200m
2	-by Aerodat Ltd. -for New Beginnings Resources Inc. -1983	-a. Aerodat/Geonics 3 frequency electromagnetic system -b. Herz 2A VLF-EM system -c. Geometrics G-803 proton precession type magnetometer	60m	N-S	660′
3	-by Terraquest Ltd. -for 655 Group Holdings Ltd. -1985	-a. GEM GSM-8BA proton precession type magnetometer -b. Herz Totem 2A VLF-EM system	100m	37	100m
6	-by Aerodat Ltd. -for Cotton Valley Resources Ltd. -1983	-a. Aerodat/Geonics 3 frequency electormagnetic system -b. Herz 2A VLF-EM system -c. Geometrics G-803 proton precession type magnetometer	60m	N-S	660′

Map Index No.	AIRBORNE GEOPHYSICAL SURVEY DATA		Flight Altitude	Flight Line Direct.	Flight Line Spacing
	-by -for -year	Type of Survey			
7	-by Aerodat Ltd. -for H. Vance White -1983	-a. Aerodat/Geonics 3 frequency electromagnetic system -b. Herz 2A VLF-EM system -c. Geometrics G-803 proton precession type magnetometer	60m	N-S	660'
8	-by Terraquest Ltd. -for Cream Silver Mines Ebony Gold Production -1988	-a. Scintrex B/W 2321H8 Cesium magnetometer -b. Herz Totem 2A VLF-EM system	100m	360	100m
9	-by Aerodat Ltd. -for Dominion Explorers Inc. -1988	-a. Aerodat 3 frequency electromagnetic system -b. Herz Totem 2A VLF-EM system -c. Scintrex VIW 2321H8 cesium magnetometer	60m	000 180	125m
10	-by Terraquest Ltd. -for Daiwan Engineering Ltd. -1988	-a. Scintrex BIW 2321H8 cesium magnetometer -b. Herz Totem 2A VLF-EM	100m	040	100m

PILOT HARBOUR NW

SELECTED REFERENCES				
Author	Date	Title	Reference	Map Scale and/or Reprt/Pages
Wadge, D. R.	1980	Airborne Electromagnetic - Magnetic Surveys by Scintrex for the OGS	OGS MP 96 Summary of Field Work	p. 150
Wolfe, W. J.	1976	Regional Geochemical Reconnaissance of Archean Metavolcanic - Metasedimentary Belts in the Pukaskwa Region	ODM GR 158	54 pages
Wolfe, W. J.	1973	Regional Geochemical Reconnaissance of Archean Metavolcanic - Metasedimentary Belts in the Pukaskwa Region, Algoma and Thunder Bay Districts	OGS OFR 5091	62 pages
Wolfe, W. J. Wright, G. R.	1969	Operation Pukaskwa, Districts of Thunder Bay and Algoma: Cold Extractable Heavy Metals in Stream and Spring Sediments	ODM Prelim. Map P. 508	1"=1mile
Wolfe, W. J. Wright, G. R.	1969	Operation Pukaskwa, Districts of Thunder Bay and Algoma: Geochemistry of Copper in Stream and Spring Sediments	ODM Prelim. Map P. 509	1"=1mile
Wolfe, W. J. Wright, G. R.	1969	Operation Pukaskwa, Districts of Thunder Bay and Algoma: Geochemistry of Zinc in Stream and Spring Sediments	ODM Prelim. Map P. 510	1"=1mile
Wolfe, W. J. Wright, G. R.	1969	Operation Pukaskwa, Districts of Thunder Bay and Algoma: Geochemisty of Manganese in Stream and Spring Sediments	ODM Prelim. Map P. 511	1"=1mile

Map Site No.	GEOCHEMICAL SURVEY DATA		By	Reference(s)
	Type of survey	Analysis for		
1	Lake Sediment and Water Geochemical	Zn, Cu, Pb, Ni, Co, Ag, Mn, As, Mo, Fe, U, F	OGS-GSC	OGS OFR 5266
2	Stream and Spring Sediment	Cu, Ni, Zn, Co, Mn and cold extractable heavy metals	Wolfe, W. J. for the OGS	ODM GR 158 and 6 Maps

GEOCHRONOLOGY DATA – AGE DATING

Site No. on Map	Method	Material	Reference	Result

PILOT HARBOUR NW

AERIAL PHOTOS; MOSAICS; IMAGERY

The following items are available for inspection at the Resident Geologist Office

(a) Aerial Photographs

1"=1/4 mile, black & white; 1980; see Addenda (p. 15-1) for details

(b) Photomosaics

(c) Satellite Imagery

1. Canada Centre for Remote Sensing Side Aperture Radar - HS880173 (C); May, 1988 1:50 000 (Black & White)

2. Canada Centre for Remote Sensing Side Aperture Radar - HS880175 (C); May, 1988 1:50 000 (Black & White)

3. Experimental composite of Airborne Radar (SAR) and Total Field Aeromagnetics, SAR Data Acquired 24-May-88 by CCRS Radar Development Program. Total Magnetic Field Derived From Digital Archives of OGS Map 81 143 R. B. Barlow. Processed at Ontario Centre for Remote Sensing/MNR 10-Feb-89 1:50 000

4. Experimental Composite of Airborne Radar (SAR) and Total Field Aeromagnetics SAR Data Acquired 24-May-88 by CCRS Radar Development Program. Total Magnetic Field Derived From Digital Archives of OGS Map 81 143 R. B. Barlow. Processed at Ontario Centre for Remote Sensing/MNR 10-Feb-89 1:100 000

TOPOGRAPHIC MAPS (selected)			
Scale	Year	Name and/or Number	By
1:50 000	1970	Michipicoten Island North: NTS 41N/13	Surveys and Mapping Branch: Department of Energy, Mines and Resources
1:100 000	1979	Michipicoten Island: NTS 41N/NW	Surveys and Mapping Branch: Ministry of Natural Resources

NEWSPAPER CLIPPINGS FILE			
PAPER	ISSUE DATE(S)	PAGE	ARTICLE HEADLINE OR COMPANY AND/OR SUBJECT
Northern Miner	12/09/82		Cotton Valley Acquires two gold properties
Northern Miner	02/07/83		Exploration shifted to the Hemlo old camp Ontario-New funding planned to raise $2 000 000 New Beginnings Resources Inc.
Northern Miner	02/14/83		Three projects underway in three gold or silver belts Brass Ring Resources Inc.
Northern Miner	10/05/87	24	The Applegath Group of Companies-Mishibishu Lake area New Beginnings Resources Inc.
Northern Miner	11/16/87		Villeneuve in Mishibishu
Northern Miner	11/16/87	A23	The Applegath Group of Companies-Mishibishu Lake area New Beginnings Resources Inc.
Northern Miner	02/22/88	24	The Applegath Group of Companies-Mishibishu Lake area Oneida Resources Ltd.
Northern Miner	04/25/88	25	Antimony mine, gold potential have Dominion Explorers busy
Northern Miner	05/30/88	24	The Applegath Group of Companies Mishibishu Lake area Villeneuve Resources Ltd.

NEWSPAPER CLIPPINGS FILE

PAPER	ISSUE DATE(S)	PAGE	ARTICLE HEADLINE OR COMPANY AND/OR SUBJECT
Northern Miner	06/27/88	12	The Applegath Group-update on the Mishibishu area Villeneuve Resources Ltd.
Northern Miner	07/11/88	16	Villeneuve stakes granites, expands in Mishibishu camp
Northern Miner	08/01/88	24	A 12 page summary report on the Mishibishu Lake area is being updated and will be released shortly Villeneuve Resources Ltd.
George Cross Newsletter	08/10/88		Mishibishu gold belt entered Acheron Resources Ltd.
George Cross Newsletter	09/02/88		Mishibishu Lake Explorations started Oil city Lubricants Ltd.
George Cross Newsletter	09/06/88		Cream Silver Mines Ltd.
George Cross Newsletter	09/12/88		Claims acquired in Mishibishu Lake area Ebony Gold Corporation
George Cross Newsletter	10/14/88		Acheron expands Mishibishu Lake gold belt holdings
George Cross Newsletter	10/17/88		Oil City Lubricants Ltd.
George Cross Newsletter	11/27/88		Oil city Lubricants Limited Central Crude Ltd. Hemlo Gold Mines Inc.
George Cross Newsletter	12/01/88		Universal Trident Industries Ltd.

MAP LEGENDS

A. FILES INDEX MAP

FILE AREAS See pages 4-1,2 .... of text

- ■ Reference number is always inside work area outlined. See listing in text pages.
- ☐ Small area of exploration data
- ☐ File covers whole township or area
- ☐

B. EXPLORATION DATA MAP

MINERAL OCCURRENCES: See pages 3-1,2.... of text

- ■ Mineral occurrence at surface, with reference letter
- ☐ Mineral occurrence with shaft, depth given with reference letter
- ☐ Mineral occurrence reported but exact location uncertain, with reference letter
- ☐ Mineralized float with reference letter
- ☐ Mineral occurrence encountered in drilling, with reference letter
- ☐

DRILLHOLES: See pages 5-1,2.... of text

- ☐ Location of single drillhole, with reference number
- ☐ Location of group of closely spaced drillholes, with reference number
- ☐ Drillhole, exact location uncertain, with reference number
- ☐ Property with underground drillholes in this general area, with reference number
- ☐ Property with drillholes which have not been plotted on map, with reference number
- ☐ Reverse circulation drillhole; churn drilling, with reference number
- ☐

GEOCHEMICAL: See pages 7-1,2....of text

- ■ Geochemical sample site, with reference number
- ☐ Area of geochemical sampling, with reference number
- ☐

GEOPHYSICAL ANOMALIES

Airborne Surveys: See pages 6-1,2.... of text

- ☐ -AM- Airborne magnetic anomaly
- ■ Airborne electromagnetic anomaly
Length of anomaly along flight line
- ■ Airborne electromagnetic anomaly
Location of anomaly along flight line
- ■ Airborne electromagnetic anomaly
Conductor axis: definite, probable, possible
- ☐ -AEM- Airborne electromagnetic anomaly
Conductor axis: Location of flight lines uncertain
- ☐ -ARA- Airborne radiometric anomaly

Ground Surveys

- ☐ -M- Ground magnetic anomaly
- ■ -VL- Ground electromagnetic anomaly
(VL Vertical loop, HL Horizontal loop
VLF Very low freq.; Turam, JEM
Crone Em - 16)
- ☐ -RA- Ground radiometric anomaly
- ☐ -IP- Induced polarization anomaly
- ☐ -SP- Self potential anomaly
- ☐ -AFMAG- Audio-frequency magnetic anomaly
(total intensity)
- ☐ -R- Resistivity anomaly
- ☐ -GR- Gravity anomaly
- ☐

GEOCHRONOLOGICAL DATA: See page 8 of text

- ☐ Age dating material sampling site, with reference number
- ☐

MISCELLANEOUS DATA

- ☐ Trenching, pit
- ☐ Adit
- ☐ Sand and or gravel pit
- ☐ Rock quarry
- ☐ Open pit
- ☐
- ☐
- ☐
- ☐

NEWSPAPER CLIPPINGS FILE			
PAPER	ISSUE DATE(S)	PAGE	ARTICLE HEADLINE OR COMPANY AND/OR SUBJECT
George Cross Newsletter	12/29/88		Gold assays reported from Pilot Harbour Oil City Lubricants Ltd.
George Cross Newsletter	02/08/89		Mishibishu property optioned Mishibishu Resources Ltd.-Granges Exploration Ltd.

OGS/ODM GENERAL INDEX SEARCH

Words Searched:

Brown Lake
Homer Township
Julia River
Kink Lake
Little Pipe River
Pukaskwa River
Tug Harbour

Index Volume	Listing:	Report Volume	Part	Page
1	Julia River, Lake Superior			
	Character,	14	1	284
	Cross section of shore near	14	1	336,337
	Iron bearing rocks near:			
	appearance favourable,	11	1	339
	notes by J.M. Bell	14	1	333-335
	Pukaskwa River, Lake Superior			
	Berries	13		147,155
	Brook Trout	14	1	297
	Caribou	13		137,138
	Fall, in last 25 miles	14	1	286
	Gold near mouth	14	1	354
	Gorges, photo	14	1	283,284
	High hills	14	1	281
	Jaspilite near mouth	14	1	309
	Name, spelling of	8		133
	Notes by Bell, J.M.	14	1	283,284
	Coleman	8		137,138
	Quartz vein near mouth, photo	14	1	353
	Rocks on and near	8		143
		14	1	313
	conglomerate	8		142,166
		11		167
		14	1	346
	granite	14	1	336,349
	iron bearing	14	1	305,316
	Keweenawan	8		168
	schists	14	1	306
	Shores east and west, description	8		133,134
	Trees	8		138
		14	1	296
	Waterpower	14	1	299

OGS/ODM GENERAL INDEX SEARCH

Words Searched:

Index Volume	Listing:	Report Volume	Part	Page
2	Julia River, Lake Superior iron ores	I.O.		187
	Pukaskwa River, Lake Superior Iron claims	I.O.		187
3	No Listings			
4	No Listings			
5	No Listings			
6	No Listings			
7	No Listings			
8	Julia River Occurrence Homer Tp., Thunder Bay District	MRC 11		382
	Pukaskwa Operation, Thunder Bay and Algoma Districts by G. Bennett, P.C. Thurston and J.F. Giguere	MP 22		31-34
	Pukaskwa River Area, Thunder Bay District geology	MP 17		21-22
9	Homer Township, Thunder Bay District Geology of the Pukaskwa-University Rivers area	GR 153		
9	Pukaskwa Area, Algoma and Thunder Bay Districts Geochem study of the area Report on, 1976, by W.J. Wolfe	GR 158		

OGS/ODM GENERAL INDEX SEARCH

Words Searched:

Index Volume	Listing:	Report Volume	Part	Page
9	Pukaskwa Depot Homer Township, Thunder Bay District	GR 153		32
	Pukaskwa Harbour Pukaskwa River area	GR 158		10
	Pukaskwa River Area, Algoma & Thunder Bay Districts Report (quaternary) and map 5096 on, 1979 by J.F. Gartner and D.F. McQuay	GR 158		
	Pukaskwa-University Rivers Area Algoma and Thunder Bay Districts Copper	GR 153		39-53 passim
	Geology of the area Report, maps 2332 and 2333 and chart on, 1977 by G. Bennett and P.C. Thurston	GR 153		
	gold			38-51 passim
	iron			38-42 passim
	zinc			40,44, 48

PILOT HARBOUR NW

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scale and/or Reprt/Pages
Barlow, R. B.	1988	Total Magnetic Field Colour Image Developed from Digital Archives of the OGS, Wawa Area, Districts of Algoma, Thunder Bay & Sudbury	OGS Geophysical/ Geochemical Series Map 81143	1: 100 000
Barlow, R. B.	1988	Calculated Second Vertical Derivative Colour Image Developed from Digital Archives of the OGS, Wawa Area, Districts of Algoma, Thunder Bay & Sudbury	OGS Geophysical/ Geochemical Series Map 81144	1: 100 000
Barlow, R. B.	1988	Directly Shadowed Total Magnetic Field Colour Image, Developed from Digital Archives of the OGS, Wawa Area, Districts of Algoma, Thunder Bay & Sudbury	OGS Geophysical/ Geochemical Series Map 81145	1: 100 000
Bell, J. M.	1905	Iron Ranges of Michipicoten (West)	OBM AR Vol. 14, Pt. 1, with Map 14a	p. 278-355 1: 126 720
Bennett, G., Thurston, P. C., Giguere, J. F.	1968	Summary of Field Work by the OGS, No. 12, Operation Pukaskwa, Districts of Thunder Bay and Algoma	OGS MP 22	p. 31-34
Bennett, G., Thurston, P. C. Giguere, J. F.	1972	Pukaskwa River Sheet	ODM Map 2332	1"=1mile

SELECTED REFERENCES				
Author	Date	Title	Reference	Map Scale and/or Reprt/Pages
Bennett, G., Thurston, P.C. Giguere, J.F.	1969	Operation Pukaskwa, Districts of Algoma & Thunder Bay	ODM Prelim. Map P. 541	1"=2miles
Bennett, G., Thurston, P.C. Giguere, J.F.	1969	Operation Pukaskwa, Pukaskwa River Sheet, Districts of Thunder Bay and Algoma	ODM Prelim. Map P. 506	1"=1mile
Bennett, G. Thurston, P.C.	1977	Geology of the Pukaskwa - University Rivers Area, Districts of Algoma and Thunder Bay	ODM GR 153 and 2 Maps	60 pages 1"=1mile
Bennett, G. Thurston, P.C.	1972	Operation Pukaskwa, Districts of Algoma and Thunder Bay, Ontario	OGS OFR 5073	93 pages
Bowen, R.P.	1985	Precambrian Geology of the Mishibishu Lake Area	OGS OFM 38	1"=1/2mile
Bowen, R.P. Logothetis, J. Heather, K.B.	1986	Mishibishu Lake Area, South Central Section	OGS Prelim. Map P. 2971	1"=1/4mile
Coker, W.B. Shilts, W.W.	1979	Lacustrine Geochemistry Around the North Shore of Lake Superior: Implications for Evaluation of the Effects of Acid Precipitation	GSC Paper 79-1C	p. 1-15

SELECTED REFERENCES				
Author	Date	Title	Reference	Map Scale and/or Reprt/Pages
Coleman, A. P.	1899	Map of the Western Part of the Michipicoten Mining Division, Algoma District	OBM Map 8b	1: 253 440
Coleman, A. P.	1899	Copper Regions of the Upper Lakes, Ontario	OBM AR Vol. 8, Pt. 2	p. 121-174
Gartner, J. F. McQuay, D. F	1979	Pukaskwa River Including Michipicoten Island: Northern Ontario Geology Terrain Study	NOEGTS Study 72 with Map 5096	14 pages 1: 100 000
Giblin, P. E.	1967	Annual Report of the Resident Geologist's Section Pt. 2, Sault Ste. Marie District	OGS MP 17	p. 21-22
Logan, W. E. Murray, A.	1847	North Shore of Lake Superior	GSC Rpt. of Progress 1846-7	p. 5-35
McKellar, Peter	1912	The Otter Head Tin Swindle	The Thunder Bay Historical Society	p. 11-13
Meyn, H. D. Robertson, J. A.	1975	Iron Deposits of Ontario, East Central Sheet	ODM Prelim Map P. 1043	1: 1 013 760

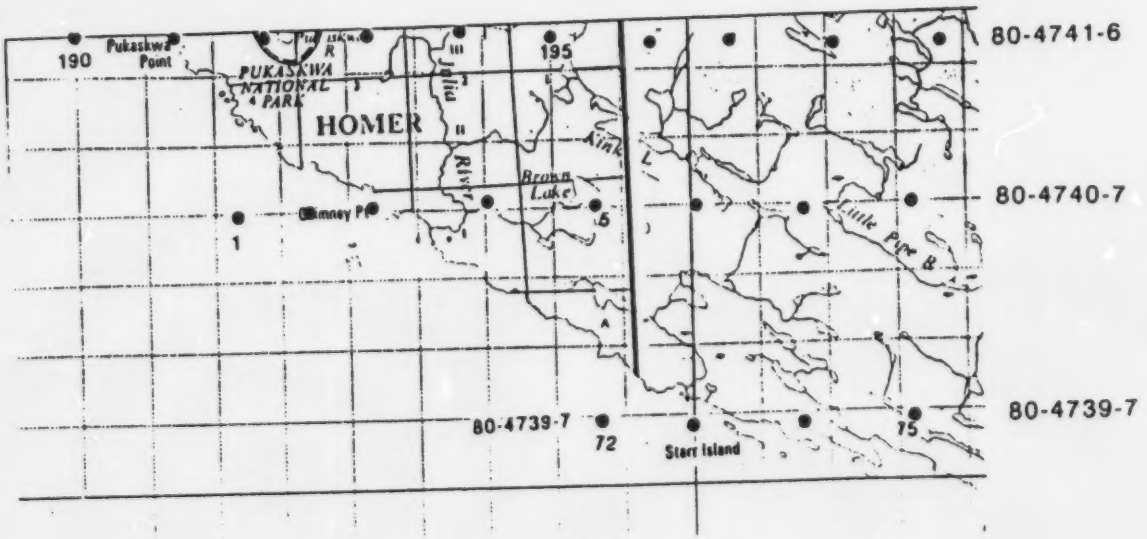
SELECTED REFERENCES				
Author	Date	Title	Reference	Map Scale and/or Reprt/Pages
Milne, V.G. et. al.	1972	Manitouwadge - Wawa Sheet	ODM Map 2220	1"=4miles
ODM-GSC	1963	Aeromagnetic Map: Michipicoten Island	ODM-GSC Aeromagnetic Series Map 2164G	1"=1mile
OGS-GSC	1979	Regional Lake Sediment and Water Geochemical Reconnaissance, Eastern Shore Lake Superior	OGS OFR 5266 and 16 Maps	56 pages 1:250 000
OGS	1987	Airborne Electromagnetic and Totoal Intensity Magnetic Survey, Wawa Area, Districts of Algoma, Sudbury & Thunder Bay	OGS Geophysical/ Geochemical Series Map 81023	1:20 000 2 Maps
Reid, R.G. Reilly, B.A.	1987	Mishibishu Lake Area, Districts of Algoma and Thunder Bay	OGS MP 137	p. 138-145
Scintrex Ltd.	1980	Airborne Electromagnetic and Total Intensity Magnetic Survey, Homer Township Area, Western Part, District of Thunder Bay	OGS Geophysical/ Geochemical Series Map 80480	1:20 000
Springer, Janet	1977	Ontario Mineral Potential: Michipicoten Sheet	OGS Prelim. Map P. 1516	1:250 000

SELECTED REFERENCES			Reference	Map Scale and/or Reprt/Pages
Author	Date	Title		
Wolfe, W. J. Wright, G. R.	1969	Operation Pukaskwa, Districts of Thunder Bay and Algoma: Geochemistry of Nickel in Stream and Spring Sediments	ODM Prelim. Map P. 512	1" = 1mile
Wolfe, W. J. Wright, G. R.	1969	Operation Pukaskwa, Districts of Thunder Bay and Algoma: Geochemistry of Cobalt in Stream and Spring Sediments	ODM Prelim. Map P. 513	1" = 1mile

Note #	NOTES
0	Brief computer based index level data files pertaining to mineral occurrences in this area can be found in: Rose, D.G. 1985: Mineral Inventory of the sudbury-Timmins-Sault Ste. Marie Region, Ontario; Geological Survey of Canada Open File 1087
1	This file (St. Germain 0010) also contains a compilation map completed in 1972. This compilation map suggests that an airborne electromagnetic survey was flown over the work area. The anomalies have been plotted on exploration data map B-1 which accompanies this report. There is no further information available on this survey.
2	The following is a list of Wawa file numbers with their corresponding Toronto (Assessment File Research Office) file numbers: WP-Pilot Harbour NE-4 - 2.11966 WP-Pilot Harbour NE-5 - 2.11932 WP-Pilot Harbour NW-1 - 2.12419
3	This file (41N/13NW 0010) contains a ground magnetic and electromagnetic survey completed in 1983. No valid bedrock conductors can be interpreted from the data.

ADDENDA

Map showing air photos available for viewing at Wawa Resident Geologist's Office, see p.9-1



CONVERSION FACTORS

Conversion from SI to Imperial			Conversion from Imperial to SI		
SI Unit	*Multiplied by*	*Gives*	*Imperial Unit*	*Multiplied by*	*Gives*
		LENGTH			
1 mm	0.039 37	inches	1 inch	25.4	mm
1 cm	0.393 70	inches	1 inch	2.54	cm
1 m	3.280 84	feet	1 foot	0.304 8	m
1 m	0.049 709 7	chains	1 chain	20.116 8	m
1 km	0.621 371	miles (statute)	1 mile (statute)	1.609 344	km
		AREA			
1 cm^2	0.155 0	square inches	1 square inch	6.451 6	cm^2
1 m^2	10.763 9	square feet	1 square foot	0.092 903 04	m^2
1 km^2	0.386 10	square miles	1 square mile	2.589 988	km^2
1 ha	2.471 054	acres	1 acre	0.404 685 6	ha
		VOLUME			
1 cm^3	0.061 02	cubic inches	1 cubic inch	16.387 064	cm^3
1 m^3	35.314 7	cubic feet	1 cubic foot	0.028 316 85	m^3
1 m^3	1.308 0	cubic yards	1 cubic yard	0.764 555	m^3
		CAPACITY			
1 L	1.759 755	pints	1 pint	0.568 261	L
1 L	0.879 877	quarts	1 quart	1.136 522	L
1 L	0.219 969	gallons	1 gallon	4.546 090	L
		MASS			
1 g	0.035 273 96	ounces (avdp)	1 ounce (avdp)	28.349 523	g
1 g	0.032 150 75	ounces (troy)	1 ounce (troy)	31.103 476 8	g
1 kg	2.204 62	pounds (avdp)	1 pound (avdp)	0.453 592 37	kg
1 kg	0.001 102 3	tons (short)	1 ton (short)	907.184 74	kg
1 t	1.102 311	tons (short)	1 ton (short)	0.907 184 74	t
1 kg	0.000 984 21	tons (long)	1 ton (long)	1016.046 908 8	kg
1 t	0.984 206 5	tons (long)	1 ton (long)	1.016 046 908 8	t
		CONCENTRATION			
1 g/t	0.029 166 6	ounce (troy)/ ton (short)	1 ounce (troy)/ ton (short)	34.285 714 2	g/t
1 g/t	0.583 333 33	pennyweights/ ton (short)	1 pennyweight/ ton (short)	1.714 285 7	g/t

OTHER USEFUL CONVERSION FACTORS

1 ounce (troy) per ton (short)	20.0	pennyweights per ton (short)
1 pennyweight per ton (short)	0.05	ounces (troy) per ton (short)

One gram(g) per tonne is equivalent to one part per million (1 ppm)

Note: Conversion factors which are in bold type are exact. The conversion factors have been taken from or have been derived from factors given in the Metric Practice Guide for the Canadian Mining and Metallurgical Industries, published by the Mining Association of Canada in cooperation with the Coal Association of Canada.

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PILOT HARBOUR NW

MAPS
NOT
FILMED

CARTES
OMISES